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10/594,308	09/27/2006	Yasuyuki Arai	0756-7836	3549
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Robinson Intellectual Property Law Office, P.C. 3975 Fair Ridge Drive Suite 20 North Fairfax, VA 22033			WANG, JACK K	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,308	<b>Applicant(s)</b> ARAI ET AL.
	<b>Examiner</b> JACK WANG	<b>Art Unit</b> 2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 08 September 2010.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-22 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims the limitation of "wherein a communication range between the reader/writer and the resonance circuit is longer than a communication range between the resonance circuit and the semiconductor device", whereas Applicant failed to identify the resonance circuit as first or second resonance circuit. For the purpose of art rejection below, the claim has been interpreted as -- wherein a communication range between the reader/writer and the second resonance circuit is longer than a communication range between the first resonance circuit and the semiconductor device --.

3. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claim is rejected to as failing to provide proper antecedent basis for the claimed subject matter. Applicant claims limitation of "wherein a packing material for packing a product is provided with the resonance circuit", wherein Applicant failed to disclose the packing material prior to claim limitation. For the purpose of art rejection below, the claim has been interpreted as -- A product management

system comprising: a semiconductor device; a resonance circuit; a packing material; and

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***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 22 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant claimed limitation of "wherein the second packing material is a transport vehicle", which conflict with the parent claim limitation of "the second packing material is contained in a first packing material". Therefore, the specification failed to show the transport vehicle is contained in the transport vehicle. For the purpose of art rejection below, the claim has been interpreted as -- wherein the first packing material is a transport vehicle--.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-8, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Twitchell, JR. (Pub # US 2004/0082296 A1), and further in view of Asauchi (Pub # US 2005/0001718 A1).

Consider claim 1, Twitchell, JR. teaches a product management system comprising: a first resonance circuit (LPRF) (110, Fig. 1); a second resonance circuit (MLG) (180, Fig. 1); and a reader/writer (NIM) (140, Fig. 1) for at least one of reading information stored in a semiconductor device ((RFT) (130, Fig. 1) and writing information in the semiconductor device (RFT) (130, Fig. 1), wherein a first packing material (120, Fig. 1) for packing a product (134, Fig. 1) is provided with the first resonance circuit (LPRF) (110, Fig. 1), wherein a second packing material (184, Fig. 1) for packing the first packing material (120, Fig. 1) is provided with the second resonance circuit (MLG) (180, Fig. 1), wherein the product (134, Fig. 1) is provided with the semiconductor device (RFT) (130, Fig. 1), wherein the second resonance circuit (MLG) (180, Fig. 1) can communicate with the reader/writer (NIM) (140, Fig. 1) and the first resonance circuit (110, Fig. 1), and wherein the first resonance circuit (LPRF) (110, Fig. 1) can communicate with the second resonance circuit (MLG) (180, Fig. 1) and the semiconductor device (RFT) (130, Fig. 1).

Twitchell, JR. does not teach wherein the first resonance circuit comprises a first antenna coil and a first capacitor, wherein the second resonance circuit comprises a second antenna coil and a second capacitor.

In the same field of endeavor, Asauchi teaches the first resonance circuit (311, Fig. 4b) comprises a first antenna coil (3113, Fig. 4b) and a first capacitor (3112, Fig. 4b), wherein the second resonance circuit (30, Fig. 4b) comprises a second antenna coil (301, Fig. 4b) and a

second capacitor (inherent within the IF circuit 302, Fig. 4b) [0039 and 0040] for the benefit of providing non-contact communication circuit details.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the first resonance circuit comprises a first antenna coil and a first capacitor, wherein the second resonance circuit comprises a second antenna coil and a second capacitor as shown in Asauchi, in Twitchell, JR. device for the benefit of providing non-contact communication circuit details.

Consider claim 2, Twitchell, JR. clearly shows and discloses the product management system, wherein a communication method between the reader/writer (NIM) (140, Fig. 1) and the first resonance circuit (MLG) (180, Fig. 1), a communication method between the first resonance circuit (MLG) (180, Fig. 1) and the second resonance circuit (LPRF) (110, Fig. 1), and a communication method between the second resonance circuit (LPRF) (110, Fig. 1) and the semiconductor device (130, Fig. 1) are identical to each other [0010].

Consider claim 3, Twitchell, JR. teaches the product management system, except wherein the communication method is an electromagnetic induction method.

In the same field of endeavor, Asauchi teaches the communication method is an electromagnetic induction method [0038] for the benefit of providing non-contact communication between the RFID tags.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the communication method is an electromagnetic induction method as shown in Asauchi, in Twitchell, JR. device for the benefit of providing non-contact communication between the RFID tags.

Consider claim 4, Twitchell, JR. clearly shows and discloses the product management system, wherein a communication method between the reader/writer (NIM) (140, Fig. 1) and the second resonance circuit (MLG) (180, Fig. 1) operate in accordance with Bluetooth standard [0031] is different from a communication method between the first resonance circuit (LPRF) (110, Fig. 1) and the semiconductor device (RFT) (130, Fig. 1) using inductive energy [0028].

Consider claim 5, Twitchell JR. clearly shows and discloses the product management system, wherein the communication method between the reader/writer (NIM) (140, Fig. 1) and the second resonance circuit (MLG) (180, Fig. 1) is any one of an electromagnetic induction method and a microwave method (Bluetooth) [0031].

Consider claim 6, Twitchell, JR. teaches a product management system comprising: a first resonance circuit (LPRF) (110, Fig. 1); a second resonance circuit (MLG) (180, Fig. 1); and a reader/writer (NIM) (140, Fig. 1) for at least one of reading information stored in a semiconductor device (RFT) (130, Fig. 1) and writing information in the semiconductor device (RFT) (130, Fig. 1), wherein a first packing material (120, Fig. 1) for packing a product (134, Fig. 1) is provided with the first resonance circuit (LPRF) (110, Fig. 1), wherein a second packing material (184, Fig. 1) for packing the first packing material (120, Fig. 1) is provided with the second resonance circuit (MLG) (180, Fig. 1), wherein the product (134, Fig. 1) is provided with the semiconductor device (RFT) (130, Fig. 1), wherein the second resonance circuit (MLG) (180, Fig. 1) can communicate with the reader/writer (NIM) (140, Fig. 1) and the first resonance circuit (LPRF) (110, Fig. 1), wherein the first resonance circuit (LPRF) (110, Fig. 1) can communicate with the second resonance circuit (MLG) (180, Fig. 1) and the semiconductor device (RFT) (130, fig. 1); and wherein a communication range between the

reader/writer (NIM) (140, Fig. 1) and the second resonance circuit (MLG) (180, Fig. 1) is longer than a communication range between the first resonance circuit (LPRF) (110, Fig. 1) and the semiconductor device (RFT) (130, Fig. 1).

Twitchell, JR. does not teach wherein the first resonance circuit comprises a first antenna coil and a first capacitor, wherein the second resonance circuit comprises a second antenna coil and a second capacitor.

In the same field of endeavor, Asauchi teaches the first resonance circuit (311, Fig. 4b) comprises a first antenna coil (3113, Fig. 4b) and a first capacitor (3112, Fig. 4b), wherein the second resonance circuit (30, Fig. 4b) comprises a second antenna coil (301, Fig. 4b) and a second capacitor (inherent within the IF circuit 302, Fig. 4b) [0039 and 0040] for the benefit of providing non-contact communication circuit details.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the first resonance circuit comprises a first antenna coil and a first capacitor, wherein the second resonance circuit comprises a second antenna coil and a second capacitor as shown in Asauchi, in Twitchell, JR. device for the benefit of providing non-contact communication circuit details.

Consider claim 7, Twitchell, JR. clearly shows and discloses the product management system, wherein the communication method between the reader/writer (NIM) (140, Fig. 1) and the second resonance circuit (MLG) (180, Fig. 1) is any one of an electromagnetic induction method and a microwave method (Bluetooth) [0031].

Consider claim 8, Twitchell, JR. clearly shows and discloses the product management system, wherein the semiconductor device (RFT) (130, Fig. 1) is selected from the group of an ID tag, an ID chip, an ID label, an ID seal and an ID sticker [0030].

Consider claims 20 and 21, Twitchell, JR. clearly shows and discloses the product management system, wherein the second packing material (184, Fig. 1) is a transport vehicle [0057 lines 7-12].

8. Claims 9, 11, and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Twitchell, JR. (Pub # US 2004/0082296 A1), and further in view of Smolander et al. (Pub # US 2007/0176773 A1) and Arai et al. (Pub # US 2004/0164302 A1).

Consider claim 9, Twitchell, JR. teaches a method comprising: sending at least one of a first signal comprising first information and a first electric power from a reader/writer (NIM) (140, Fig. 1) to a resonance circuit (MLG or LPRF) (180 or 110, Fig. 1); sending at least one of a second signal comprising the first information and a second electric power from the resonance circuit (MLG or LPRF) (180 or 110, Fig. 1) to a semiconductor device (RFT) (130, Fig. 1) in response to a receipt of said at least one of the first signal and the first electric power; sending a third signal comprising second information from said semiconductor device (RFT) (130, Fig. 1) to the resonance circuit (MLG or LPRF) (180 or 110, Fig. 1) in response to a receipt of said at least one of the second signal and the second electric power by the semiconductor device, sending a fourth signal comprising said second information from the resonance circuit (MLG or LPRF) (180 or 1110, Fig. 1) to the reader/writer (NIM) (140, Fig. 1), wherein the semiconductor device (RFT) (130, Fig. 1) is attached to a product (134, Fig. 1), the product (134, Fig. 1) is

contained in a packing material (120, Fig. 1), the resonance circuit (MLG or LPRF) (180 or 110, Fig. 1) is attached to the packing material (120 or 184, Fig. 1) and the reader/writer (NIM) (140, Fig. 1) is disposed outside of the packing material (120 or 184, Fig. 1).

Twitchell, JR. does not teach wherein the resonance circuit comprises thin film integrated circuit portions comprising an antenna coil and a capacitor, wherein said semiconductor device comprises a thin film integrated circuit comprising a thin film transistor, and an antenna.

In the same field of endeavor, Smolander et al. teaches the resonance circuit (22, Fig. 2a) comprises thin film integrated circuit portions [0043] comprising an antenna coil (13, Fig. 2a) and a capacitor (14, Fig. 2a) for the benefit of providing product information through reader interrogation.

Furthermore, in the same field of endeavor, Arai et al. teaches the semiconductor device (RFID tag) comprises a thin film integrated circuit comprising a thin film transistor [0076], and an antenna [0074] for the benefit of providing detail description of integrated circuit device IC label.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the resonance circuit comprises thin film integrated circuit portions comprising an antenna coil and a capacitor as shown in Smolander et al., and the semiconductor device comprises a thin film integrated circuit comprising a thin film transistor, and an antenna as shown in Arai et al., in Twitchell, JR. method for the benefit of providing product information through reader interrogation, and providing detail description of integrated circuit device IC label.

Consider claim 11, Twitchell JR. clearly shows and discloses the method, wherein the semiconductor device (RFT) (130, Fig. 1) is selected from the group of an ID tag, an ID chip, an ID label, an ID seal and an ID sticker [0029].

Consider claim 13, Twitchell, JR. teaches a product management system comprising: a semiconductor device (RFT) (130, Fig. 1); a resonance circuit (LPRF) (110, Fig. 1); a packing material (120, Fig. 1); and a reader/writer (NIM) (140, Fig. 1) for at least one of reading information stored in the semiconductor device (RFT) (130, Fig. 1) and writing information in the semiconductor device (RFT) (130, Fig. 1), wherein the packing material (120, Fig. 1) for packing a product (134, Fig. 1) is provided with the resonance circuit (LPRF) (110, Fig. 1), wherein the product (134, Fig. 1) is provided with the semiconductor device (RFT) (130, Fig. 1), wherein the resonance circuit (LPRF) (110, Fig. 1) can communicate with the reader/writer (NIM) (140, Fig. 1) and the semiconductor device (RFT) (130, Fig. 1).

Twitchell, JR. does not teach wherein the semiconductor device comprises a thin film integrated circuit comprising a thin film transistor, and an antenna, and wherein the resonance circuit comprises thin film integrated circuit portions, an antenna coil and a capacitor.

In the same field of endeavor, Arai et al. teaches the semiconductor device (RFID tag) comprises a thin film integrated circuit comprising a thin film transistor [0076], and an antenna [0074] for the benefit of providing detail description of integrated circuit device IC label.

Furthermore, in the same field of endeavor, Smolander et al. teaches the resonance circuit (22, Fig. 2a) comprises thin film integrated circuit portions [0043] comprising an antenna coil (13, Fig. 2a) and a capacitor (14, Fig. 2a) for the benefit of providing product information through reader interrogation.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the semiconductor device comprises a thin film integrated circuit comprising a thin film transistor, and an antenna as shown in Arai et al., and the resonance circuit comprises thin film integrated circuit portions comprising an antenna coil and a capacitor as shown in Smolander et al., in Twitchell, JR. device for the benefit of providing detail description of integrated circuit device IC label, and providing product information through reader interrogation.

Consider claim 14, Twitchell, JR. clearly shows and discloses the product management system, wherein a communication method between the reader/writer (NIM) (140, Fig. 1) and the first resonance circuit (MLG) (180, Fig. 1), a communication method between the first resonance circuit (MLG) (180, Fig. 1) and the second resonance circuit (LPRF) (110, Fig. 1), and a communication method between the second resonance circuit (LPRF) (110, Fig. 1) and the semiconductor device (130, Fig. 1) are identical to each other [0010].

Consider claim 15, Twitchell, JR. teaches the product management system, except wherein the communication method is an electromagnetic induction method.

In the same field of endeavor, Smolander et al. teaches the communication method is an electromagnetic induction method [0038] for the benefit of providing non-contact communication between the RFID tags.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the communication method is an electromagnetic induction method as shown in Smolander et al., in Twitchell, JR. device for the benefit of providing non-contact communication between the RFID tags.

Consider claim 16, Twitchell, JR. clearly shows and discloses the product management system, wherein a communication method between the reader/writer (NIM) (140, Fig. 1) and the second resonance circuit (MLG) (180, Fig. 1) operate in accordance with Bluetooth standard [0031] is different from a communication method between the first resonance circuit (LPRF) (110, Fig. 1) and the semiconductor device (RTF) (130, Fig. 1) using inductive energy [0028].

Consider claim 17, Twitchell, JR. clearly shows and discloses the product management system, wherein the communication method between the reader/writer (NIM) (140, Fig. 1) and the second resonance circuit (MLG) (180, Fig. 1) is any one of an electromagnetic induction method and a microwave method (Bluetooth) [0031].

Consider claims 18 and 19, Twitchell, JR. clearly shows and discloses the method, wherein the resonance circuit further comprises any one of a battery, a CPU and a memory [0016].

9. Claims 10-12, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Twitchell, JR. (Pub # US 2004/0082296 A1), and further in view of Arai et al. (Pub # US 2004/0164302 A1).

Consider claim 10, Twitchell, JR. teaches a method comprising: sending at least one of a first signal comprising first information and a first electric power from a reader/writer (NIM) (140, Fig. 1) to a first resonance circuit (MLG) (180, Fig. 1), sending at least one of a second signal comprising the first information and a second electric power from the first resonance circuit (MLG) (180, Fig. 1) to a second resonance circuit (LPRF) (110, Fig. 1) in response to a receipt of said at least one of the first signal and the first electric power, sending at least one of a

third signal comprising the first information and a third electric power from the second resonance circuit (LPRF) (110, Fig. 1) to a semiconductor device (RFT) (130, Fig. 1) in response to a receipt of said at least one of the second signal and the second electric power, sending a fourth signal comprising second information from said semiconductor device (RFT) (130, Fig. 1) to the second resonance circuit (LPRF) (110, Fig. 1) in response to a receipt of said at least one of the third signal and the third electric power by the semiconductor device (RFT) (130, Fig. 1), sending a fifth signal comprising said second information from the second resonance circuit (LPRF) (110, Fig. 1) to the first resonance circuit (MLG) (180, Fig. 1), sending a sixth signal comprising said second information from the first resonance circuit (MLG) ((180, Fig. 1) to the reader/writer (NIM) (140, Fig. 1), wherein the semiconductor device (RFT) (130, Fig. 1) is attached to a product (134, Fig. 1), the product (134, Fig. 1) is contained in a second packing material (120, Fig. 1), the second resonance circuit (LPRF) (110, Fig. 1) is attached to the second packing material (120, Fig. 1), the second packing material (120, Fig. 1) is contained in a first packing material (184, Fig. 1), the first resonance circuit (MLG) (180, Fig. 1) is attached to the first packing material (184, Fig. 1), and the reader/writer (NIM) (140, Fig. 1) is disposed outside of the first packing material.

Twitchell, JR. does not teach wherein said semiconductor device comprises a thin film integrated circuit comprising a thin film transistor, and an antenna.

In the same field of endeavor, Arai et al. teaches the semiconductor device (RFID tag) comprises a thin film integrated circuit comprising a thin film transistor [0076], and an antenna [0074] for the benefit of providing detail description of integrated circuit device IC label.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the semiconductor device comprises a thin film integrated circuit comprising a thin film transistor, and an antenna as shown in Arai et al., in Twitchell, JR. method for the benefit of providing detail description of integrated circuit device IC label.

Consider claim 11, Twitchell JR. clearly shows and discloses the method, wherein the semiconductor device (RFT) (130, Fig. 1) is selected from the group of an ID tag, an ID chip, an ID label, an ID seal and an ID sticker [0029].

Consider claim 12, Twitchell, JR. clearly shows and discloses the method, wherein the first packing material (184, Fig. 1) is selected from the group of a suitcase, a corrugated fiberboard, a container and a transporting vehicle [0057 lines 7-12].

Consider claim 22, Twitchell, JR. clearly shows and discloses the product management system, wherein the first packing material (184, Fig. 1) is a transport vehicle [0057 lines 7-12].

#### *Response to Arguments*

10. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

#### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACK WANG whose telephone number is (571)272-1938. The examiner can normally be reached on M-F 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Bugg can be reached on 571-272-2998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JACK WANG/  
Examiner, Art Unit 2612

/George A Bugg/  
Supervisory Patent Examiner, Art Unit 2612